A Short Introduction to Clinical Photography for the Plastic Surgeon

Shehab Jabir*

St. Andrews Centre for Plastic Surgery and Burns, Broomfield Hospital, Chelmsford, CM1 7ET, United Kingdom

DEAR EDITOR

Photography is an essential part of plastic surgery given the visual nature of our specialty. Its uses are innumerable; it enables us to document form and function, helps us plan an operation, assists us in teaching, serves a medico-legal purpose and may even assist with research.[1] This is by no means an exhaustive list. Yet, despite its indispensability to the proper practice of plastic surgery very few surgeons receive any sort of formal teaching or training in clinical photography. In this manuscript the author attempts to provide some of the theoretical essentials of clinical photography required to take adequate clinical images for the patient's record.

The aim of clinical photography is to present the patient most accurately as opposed to portrait photography where the aim is to iron out inconsistencies in the physical form.[2,3] The key principle underlying good clinical photography is consistency i.e. taking every picture of the patient under the exact same conditions. This may sound relatively simple but is in fact quite difficult to achieve in practice.

The principal factors to consider are (i) Lighting which is the first and most important aspect. Lighting conditions under which the photographs are taken must remain exactly the same as variations in lighting may very easily alter the appearance of pre and post-operative photographs;[2,3] (ii) Pose that refers to the position of the patient when the photograph is taken and the "perspective" or "angle" from which the camera "looks" at the patient. This must be kept as consistent as possible and is one of the more difficult competencies to achieve in photography;[2,3] (iii) Patient exposure that adequate patient exposure over the anatomical location of interest is essential. Hair should be tied back, distracting jewellery removed and the patient clothed appropriately. Ideally the same cloths should be worn if possible for pre and post-operative photographs;[2,3] (iv) Background that refers to the peripheral space around the patient. It should be free of distracting influences and preferably be of a uniform plain colour (such as light blue or green);[2,3] and (v) Magnification that all images should be of the same consistent magnification or size. The introduction of digital cameras with the "zoom" function has made this a much easier process.[2,3]

Apart from the above discussed principles, one should also have an awareness of basic photographic concepts such as lens aperture, shutter speed and exposure although this is now much less important with contemporary point and shoot digital cameras. Digital cameras tend to automatically adjust for these settings and

***Corresponding Author:**
Shehab Jabir, MD;
Resident of St. Andrews Centre for Plastic Surgery and Burns,
Broomfield Hospital, Chelmsford, CM1 7ET, United Kingdom.
Tel: +-78-5328334
E-mail: shihab.jabir@googlemail.com
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Table 1: Summary of views for regions of the body that are most commonly photographed.* The face may be further divided into other anatomical segments such as the eyelids, nose and ears which may require other views in addition to those recommended for the face.

Anatomical location	Recommended views
Face*	Frontal, lateral, oblique
Breasts	Frontal, lateral, oblique
Hand	Dorsal, volar, lateral
Abdomen	Frontal, lateral, oblique ALSO frontal with arms raised over head, lateral view with trunk bent more than 45 degrees and frontal and lateral views during Valsalva manoeuvre
Buttocks	Posterior, lateral
Legs and feet	Dorsal, plantar, lateral, posterior

have various custom modes for specific situations which enables one to obtain images in varying circumstances, e.g. during motion, and poor lighting including (i) Exposure that the image formed on the film (or its equivalent in a digital camera referred to as the charge-coupled device [CCD]) is dependent upon the amount of reflected light that reaches it from the subject. This in turn is dependent upon two factors; the lens aperture and the shutter speed;[4] (ii) Lens aperture that refers to the size of the opening that allows light to reach the film or CCD and is expressed as a number called the f-stop (the f-stop is inversely proportional to the size of the lens opening); and (iii) Shutter speed that refers to the length of time that the camera shutter stays open permitting external light to reach the film or CCD. It is expressed in seconds and maybe anywhere between 1/30th and 1/1000th of a second.

Professional photographers use various combinations of the f-stop and shutter speed to obtain varying depths of field and moving images respectively. This is beyond the remit of this short paper and any interested reader is referred to an excellent introduction to these concepts available on www.digitalcameraworld.com.

It is also important to always consider the anatomical portion of the body being photographed. Most regions of the body will involve a varying combination of frontal, lateral, posterior and oblique views (Table 1 provides a summary of views for regions of the body that are most commonly photographed).[4] The purpose for which the photographs will be used also determine what views one should take. For example in the author's institution, skin lesions such as basal cell carcinoma and squamous cell carcinoma are photographed to reduce the possibility of wrong site surgery (most elderly patients may have several skin lesions which may appear similar). In such circumstances, apart from the standard views mentioned above, it may also be useful to obtain close-up as well as distant images of the lesion orientated to landmarks to reduce the possibility of wrong site surgery. Finally readers are reminded to obtain fully informed consent from the patient before any images are taken. Consistent pre and post-operative clinical photographs reduce the need to re-orientate the observer's visual perspective each time a photograph is looked at making comparison seamless.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

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REFERENCES

1 Bhattacharya S. Clinical photography and our responsibilities. *Indian J Plast Surg* 2014;**47**:277-80.
2 Hagan KF. Clinical photography for the plastic surgery practice--the basics. *Plast Surg Nurs* 2008;**28**:188-92.
3 Yavuzer R, Smirnes S, Jackson IT. Guidelines for standard photography in plastic surgery. *Ann Plast Surg* 2001;**46**:293-300.
4 Persichetti P, Simone P, Langella M, Marangi GF, Carusi C. Digital photography in plastic surgery: how to achieve reasonable standardization outside a photographic studio. *Aesthetic Plast Surg* 2007;**31**:194-200.

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